

Course description of field crop insects

1. Course name:
Field crop insects
1. Course code:
FICI424
1. Semester/Year: Annual
Spring semester/2023-2024
1. The date this description was prepared
1 / 2 / 2024
1. Available attendance forms:
Classroom
1. Number of study hours (total)/number of units (total):
75 hours / 3.5 units
1. Name of the course administrator (if more than one name is mentioned)
Dr. Khalid Omairy Mohammed mohammed_yousuf76@uomosul.edu.iq Esraa Mohammed Ali
1. Course objectives
<ul style="list-style-type: none">• should be able to define the concept of field crop insects and the information that must be available to know the types of insects• .Choosing the suitability of factors affecting insects that infect crops• Differentiating between different planning systems and the appropriate ones• .Understand the basics of planning and use them in establishing an insect laboratory• Distinguishing between types of insects according to the information gained during studying the nature of their infestation and identifying their shapes and damages• Familiarity with the information the trainee needs and what is available to him to master his work in dealing with insects and determining the nature of the infestation• The student's awareness of the factors affecting insects and their environment and how to diagnose, combat and control them• Determine the appropriate type and the best way to diagnose the infestation and know the type insect and how to deal with it• A comprehensive study of the various types of insects, how to identify them, the nature of the infestation, and the percentage of damage they cause to the crop
2. Teaching and learning strateg
<ul style="list-style-type: none">- Interactive lecture- Brainstorming- Dialogue and discussion- Field Training- Practical exercises

- Field project
- Self- education

3. Course structure

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
1	2 theoretical	a1 Identify the taxonomic position of insects in the : animal kingdom B1 Possesses knowledge and concepts of the : factors that helped the spread of insects	Taxonomic position of insects and their characteristics, factors that aided their spread	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 1 , final exam
	3 practical	a1 The student learns about the concept of : entomology and insect classification	About entomology And classification of insects And insect body sections	Interactive lecture, brainstorming, dialogue and discussion, field training, self- learning	Short practical test 1
2	1 theoretical	a2 Determines the benefits and harms of insects : b1 Possesses the knowledge and concepts to know : the critical economic limit	Insect harms, benefits, critical economic limit of infestation and economic damage	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 1 , final exam
	3 practical	a2 The student will be able to identify the mouth : parts of insects, their types, the abdominal area, the chest area, and the parts associated with it	Insect mouth parts Chest area Abdominal area	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Direct drawing
3	1 theoretical	a2 Determines the foundations of pest resistance : and control methods	pest resistance and control methods	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 1 , final exam
	3 practical	a2 The student will be able to identify the types of : reproduction in insects and insect development	Types of reproduction in insects	Interactive lecture, brainstorming, dialogue and discussion, field training, self- learning	Field evaluation
4	1 theoretical	a2 Determines methods of controlling insects that : infect the Poaceae family C4 Draws up plans and programs to combat it :	pest control methods Practical (grass insects, description of the insect and form of (damage	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 1 , final exam report ,
	3 practical	d4 The student should be able to develop his : cognitive and research abilities on insects that infect .the Poaceae family c2: The student should be able to diagnose insects that infect the Poaceae family	Insects that infect agricultural crops Pests of the Poaceae family	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Practical short test 2 direct , drawing
5	1 theoretical	a2 Determines methods of controlling insects that : infect the Poaceae family c4 Draws up plans and programs to combat it :	Wheat and barley insects, their life cycles and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 1 , final exam report ,
	3 practical	d4 The student should be able to develop his : cognitive and research abilities on insects that infect .the Poaceae family c2: The student should be able to diagnose insects that infect the Poaceae family	Insects that infect agricultural crops Pests of the Poaceae family	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-	Field evaluation

				learning	
6	1 theoretical	First semester exam a2 Determines methods of controlling insects that : infect the Poaceae family C4 Draws up plans and programs to combat it :	First semester exam Insects that infect corn crops	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Short test, final test
	3 practical	c58 The student should be able to master the concepts related to insects that infect crops c2: The student should be able to diagnose insects that infect the corn crop	Corn crop pests	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Direct drawing and homework
7	1 theoretical	a2 Determines methods of controlling insects that : infect the Poaceae family C4 Draws up plans and programs to combat it :	Rice insects , their life cycles, and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 2 , final exam
	3 practical	c2: The student should be able to diagnose insects that infect rice crops	Rice crop pests	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, field project, self-learning	Field project
8	1 theoretical	a2 Determines methods of controlling insects that : infect the leguminous family C4 Draws up plans and programs to combat it :	Insects of leguminous crops, their life cycles and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 2 , final exam
	3 practical	C2: The student should be able to diagnose insects that infect the leguminous family	Pests of leguminous crops	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Direct drawing and homework
9	1 theoretical	a2 Determines methods of controlling insects that : infect the cotton crop C4 Draws up plans and programs to combat it :	Cotton crop insects , their life cycles and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester exam 2 , final exam
	3 practical	c2 The student should be able to diagnose insects : that infect the cotton crop	Cotton insects	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Direct drawing and homework
10	1 theoretical	a2 Determines methods of controlling insects that : infect sugar beets c4 Draws up plans and programs to combat it :	Sugar beet insects , their life cycles and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Semester test 2
	3 practical	c2 The student should be able to diagnose insects : that infect sugar beet crops	Beet insects	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Direct drawing and homework
11	1 theoretical	a2 Determines methods of controlling insects that : infect tobacco C4 Draws up plans and programs to combat it :	Sugar tobacco crop insects , their life cycles and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Final test
	3	c2: The student should be able to diagnose insects	Tobacco insects	Interactive lecture,	Direct

	practical	that infect the tobacco crop		brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	drawing and homework
12	1 theoretical	a2 Determines methods of controlling insects that : infect the sunflower C4 Draws up plans and programs to combat it :	Sunflower crop insects , their life cycles and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Final test
	3 practical	c2 The student should be able to diagnose the : insects that infect the sunflower crop	Sunflower insects	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Direct drawing and homework
13	1 theoretical	a2 Determines methods of controlling insects that : infect castor beans C4 Draws up plans and programs to combat it :	Castor bugs , their life cycles and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Final test
	3 practical	c2 The student should be able to diagnose the : insects that infect the castor crop	Castor bugs	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Direct drawing and homework
14	1 theoretical	a2 Determines methods of controlling insects that : infect safflower c4 Draws up plans and programs to combat it :	Safflower insects , their life cycles, and control	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Short test, final test
	3 practical	c2 The student should be able to diagnose insects : that infect the safflower crop	Safflower insects	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, and self-learning	Short practical test 3
15	1 theoretical	Second semester exam	Second semester exam	Interactive lecture, brainstorming, dialogue and discussion, self-learning	Short test, final test
	3 practical	Semester exam 2	Semester exam 2	Interactive lecture, brainstorming, dialogue and discussion, field training, practical exercises, field project, self-learning	Field project

4. Course evaluation

T	Calendar methods	Calendar date (week)	Class	Relative % weight
1	Report 1	fourth week	2.5	2.5
2	Report 2	The fifth week	2.5	2.5
3	Short test (1)Quiz	sixth week	2	2
4	Short test (2)Quiz	The fourteenth week	2	2
5	Short test (3)Quiz	The fifteenth week	1	1
6	Semester test (1)	the sixth week	7.5	7.5
7	Semester test (2)	The eleventh week is difficult	7.5	7.5
8	Final theoretical test	Final semester exams	40	40

9	Practical field project	The fifteenth week	5	5
10	Field evaluation	The third and fifth week	2	2
11	Short practical test (1)Quiz	The first week	1	1
12	Short practical test (2)Quiz	fourth week	0.5	0.5
13	Short practical test (3)Quiz	The fourteenth week	1	1
14	Live drawings and homework	Weeks 6, 8, 9, 10, 11, 12 and 13	5.5	5.5
15	Final practical test	Final semester exams	20	20
	the total	100	%100	%100

5. Learning and teaching resources

Required textbooks (methodology, if any)	The theoretical book on field crop insects / written by Dr. Salem Jamil Girgis, Dr. Hamza Kazem Abbas, and Dr. Muhammad Abdel Karim Muhammad
Main references (sources)	- The theoretical book on field crop insects / written by Dr. Salem Jamil Girgis, Dr. Hamza Kazem Abbas, and Dr. Muhammad Abdel Karim Muhammad
Recommended supporting books and references (scientific journals, (...reports	Pests of Field Crops and Pastures [OP]: Identification and Control / PT Bailey (Editor
Electronic references, Internet sites	https://www.amazon.com/Pests-Field-Crops-Pastures-Identification/dp/0643067582

Theoretical subject teacher
Dr. Khalid Omary Mohammed

Practical subject teacher
Esraa Mohammed Ali

Chairman of the Scientific Committee
Dr. Weam Yahya Rasheed

Chief of the Plant Protection Department
Dr Moysar Muhammad Aziz

		The student acquires knowledge and concepts related to soil preparation equipment			
	3 Practical	4a: The student demonstrates the primary soil preparation equipment (digger plow - excavator plow). The student should be able to know how to manage agricultural equipment in the field	Mechanism of operation of primary soil preparation equipment (digger plow-dump plow)	Interactive lecture, brainstorming, dialogue and discussion, field training	Short practical test1
2	2 Theoretical	4a: The student shows the primary soil preparation equipment (disc plow, vertical disc plow, and rotary plow) The student should be able to have knowledge of management Agricultural equipment in the field	Primary soil preparation equipment (dump disc plow - vertical disc plow - rotary plow)	Interactive lecture, brainstorming, dialogue and discussion, field training	Semester exam 1, final exam
	3 Practical	3c: The student shows the primary soil preparation equipment (dump disc plow - vertical disc plow - rotary plow)	The mechanism of operation of primary soil preparation equipment (dump disc plow - vertical disc plow - rotary plow)	Interactive lecture, brainstorming, dialogue and discussion, field training	Short practical test1
3	2 Theoretical	4a: The student explains the operational arrangements for the tillage equipment (flip disc plow - vertical disc plow - rotary plow) The student acquires knowledge and concepts related to how to organize and operate plowing machines	Operating regulations for tillage equipment	Interactive lecture, brainstorming, dialogue and discussion, field training	Semester exam 1, final exam
	3 Practical	4b: The student explains the main and component parts of each plow of primary tillage equipment (flip disc plow - vertical disc plow - rotary plow) The student acquires knowledge and concepts related to how to organize	Working mechanism and operating regulations for primary tillage equipment (flap disc plow - vertical disc plow - rotary plow)	Interactive lecture, brainstorming, dialogue and discussion, field training	Short practical test1